

## **APPENDIX C**

### **MCM#3 Illicit Discharge Detection and Elimination**

#### **Supporting Documents**



# The Villages at Fort Belvoir Resident Responsibility Guide

Revised 14 August 2013

# Pet Waste and Water Quality

KEEP THE STORM DRAINS CLEAN FOR THOSE DOWNSTREAM

*Pet waste left to decay on the street or grass, or waste washed into storm drains, is a threat to water quality and public health.*

Pollutants from animal wastes can be washed into streams and storm drains during rain or snowmelt. Storm drains around your housing area and elsewhere on the installation usually discharge directly into streams, ponds, or rivers. Are you cleaning up after your pet?

## **How Do You Dispose of Your Pet's Waste?**

Pet waste left to decay on the street or grass, or waste washed into storm drains, is a threat to water quality and public health. When pet waste enters a stream with storm water runoff, it consumes oxygen upon decay. The oxygen reduction can harm aquatic life and adversely affect overall stream health. Pet waste also contains nutrients that encourage weed and algae growth. In addition, pet waste may carry infectious organisms, bacteria, and other pathogens that can make streams and ponds unsafe for recreation.

## **Are You Risking Your Health?**

Improper disposal of pet waste is not just a water quality issue. Pets, children who play outside, and adults who garden risk infection from the bacteria and parasites found in pet waste. Fortunately, there are some simple things you can do to help keep the installation and our streams clean and healthy.

## **You Can Make a Difference!**

Cleaning up after your pet can be as simple as taking a plastic bag or paper cup along on your next walk. But what should you do with the waste you collect? Here are some tips for proper disposal:

## **Flush it down the toilet.**

The water from your toilet goes to a wastewater treatment facility. Special processes there can remove animal waste prior to discharging the water to a stream, pond, or river. Remember to prevent plumbing problems by not flushing rocks, sticks, or kitty litter down the toilet. Cat feces may be scooped out and flushed down the toilet, but used litter should be put in a closed bag for disposal as household garbage.

## **Bury it in the yard.**

Dig a hole or trench that is about 5 inches deep, and away from vegetable gardens, ponds, streams, rivers, ditches or wells. Fully cover the waste with soil. When the waste begins to decay, valuable nutrients are released as fertilizer for nearby plants.

## **Put it in the trash.**

Bag the waste and place the closed bags in the trash.

## **Around Your Home:**

For yard pet waste, be sure to clean up areas near wells, drainage ditches, waterways, and storm drains. Promptly remove pet waste from areas where children play. To prevent possible contamination, thoroughly wash hands with soap and water after any contact with pet waste.

Contact the DPW-Environmental and Natural Resources Division at (703) 806-4676.



*Improving Storm Water Quality*



# Lawn Care, Fertilizer and Water Pollution

KEEP THE STORM DRAINS CLEAN FOR THOSE DOWNSTREAM

*Natural methods of lawn care in conjunction with chemicals can produce a healthy lawn and protect water quality.*

The overuse of lawn fertilizers and weed killers can harm streams, rivers, and ponds. Sole reliance on chemicals is no longer recommended for maintaining a beautiful lawn. Instead, natural methods of lawn care in conjunction with chemicals can produce a healthy lawn and protect water quality. Certain grasses can filter pollutants (fertilizers, herbicides, sediment) and some types can control weeds while requiring less fertilizer and water. Here are some tips:

## Mowing

- ◆ Don't mow too close to the ground; taller grass produces deeper roots and controls weeds.
- ◆ Practice "grasscycling", and leave clippings on the lawn to provide natural fertilization (do not blow them into ditches or streams).
- ◆ Do not mow wet grass; this causes clumping.
- ◆ Use composted yard waste as mulch and soil conditioner.

## Fertilizers

Fertilizers contain nutrients (nitrogen and phosphorus) that can harm water quality by causing undesirable plants to grow in streams and ponds, blocking oxygen from the fish. Fertilizers high in nitrates (nitrogen) are more likely to enter streams because they are released more quickly. Here are some best management practices:

- ◆ Apply according to label directions. Do not apply fertilizer:
  - when the ground is frozen.
  - before or after heavy rain or irrigation.
  - during cold weather (less than 55 degrees Fahrenheit).
  - directly into, or near, streams, ponds, or ditches.
- ◆ Minimize application rates on slopes.
- ◆ Use fertilizers labeled "slowly-available nitrogen" on sandy soils, since they are less likely to enter streams.
- ◆ Base fertilizer applications on a representative soil test that shows the amounts of nutrients in the soil, waiting three to four weeks after the last fertilization.
- ◆ Aerate compacted soil to aid incorporation of fertilizer and reduce runoff.
- ◆ Maintain a vegetated buffer zone between frequently fertilized lawns and streams to prevent pollution and provide uptake of nutrients.
- ◆ Water carefully to prevent runoff and leaching.
- ◆ Water in the early morning for optimal results.
- ◆ Follow local applicable water use restrictions.

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*Improving Storm Water Quality*

# Automobile Maintenance and Car Care - Tips for the Homeowner

KEEP THE STORM DRAINS CLEAN FOR THOSE DOWNSTREAM

*Oil and grease can destroy fish gills and block oxygen from the fish, while other chemicals can have toxic effects.*

Routine automobile maintenance can pollute streams, ponds, and rivers. This occurs when washing vehicles or if oil or other vehicle fluids leak onto paved areas. Storm water runoff from paved areas (roads, driveways, and parking areas) carries contaminants into streams, ponds, and rivers, harming aquatic life. Oil and grease can destroy fish gills and block oxygen from the fish, while other chemicals can have toxic effects. Here are some maintenance tips that will reduce water pollution:

## Fluid Maintenance

- ◆ Change your oil and other lubricants regularly.
- ◆ Identify leaking fluids and repair promptly.
- ◆ Use a funnel and drip pan to contain spills during fluid changes.
- ◆ Drop off used oil at the Autocraft shop or AAFES gas station.
- ◆ Place drip pans under the spouts of liquid storage containers.

## Cleaning

- ◆ Dry sweep garage floors instead of wet washing.

- ◆ Use nontoxic cleaning products, such as:
  - ◆ baking soda paste to clean battery terminals, chrome, wheels, and tires;
  - ◆ dishwashing soap or abrasive soap pads for tire cleaning; and
  - ◆ white vinegar with water to clean windows; dry with crumpled newspaper.

## Vehicle Washing

- ◆ Wash vehicles at a car wash that recycles water, or use a bucket and sponge (not a running hose). This conserves water and minimizes runoff.

## Spills

- ◆ Prepare a spill cleanup kit for use in your garage.
- ◆ Clean up spills immediately, using kitty litter, sawdust, or cornmeal.
- ◆ Dispose of waste material properly; call the environmental office for instructions.

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